

WHAT IS CLAIMED IS:

1. An electronic device including:
a display screen;
5 a keyboard coupled by a processor to the display screen and having a plurality of keys, including a combined character and navigation key having a plurality of detectable input positions including at least one character input position corresponding to a character input for a displayable character and at least one navigation control input position corresponding to a navigation control input for movement of a navigation
10 indicator on the display screen, the combined character and navigation key providing tactile single click feedback to a user when the combined character and navigation key is moved to any of the input positions.
2. The electronic device of claim 1 wherein the character and navigation key is a
15 space bar key, the displayable character being a space character, the space bar key having a first navigation control input position corresponding to movement of the navigation indicator in a first direction and a second navigation control input position corresponding to movement of the navigation indicator in a second direction.
- 20 3. The electronic device of claim 2 wherein the keyboard includes a command key for sending a command input signal to the processor when in an activated position, the processor programmed for causing the navigation indicator on the display screen to move in the first direction when the command key is in the activated position while the space bar key is simultaneously in the first navigation control input position and to move
25 in the second direction when the command key is in the activated position while the space bar key is simultaneously in the second navigation control input position.
4. The electronic device of claim 3 wherein, in a text entry input mode, the processor is programmed for causing the space character to be added to text displayed
30 on the display screen when the space bar key is in any of the detectable input positions and the command key is not simultaneously activated.

5. The electronic device of claim 2 wherein the first navigation control position corresponds to a left movement control input and the second navigation control position corresponds to a right movement control input.

5

6. The electronic device of claim 2 wherein the first navigation control position corresponds to an up movement control input and the second navigation control input position corresponds to a down movement control input.

10 7. The electronic device of claim 2 wherein the device includes a housing having a face in which the keyboard is mounted, the keys including a plurality of alphanumeric keys corresponding to alphanumeric character inputs, the alphanumeric keys being arranged in a plurality of rows across the face, the space bar key being elongated relative to the alphanumeric keys and positioned on the face below the alphanumeric
15 keys.

8. The electronic device of claim 7 wherein the electronic device is a handheld device and the display screen is mounted within the face.

20 9. The electronic device of claim 1 wherein the keyboard including a resilient member acting on the combined character and navigation key for providing the tactile single click feedback to a user when the combined character and navigation key is moved to any of the input positions.

25 10. The electronic device of claim 9 wherein the keyboard includes a plurality of switches disposed on a printed circuit board adjacent the character and navigation key for detecting movement of the character and navigation key to the input positions, the plurality of switches including at least first and second switches and a central switch located between the first and second switches, the character and navigation key being
30 displaceable towards the printed circuit board and pivotally mounted relative to the central switch for activating the first switch and the central switch independently of the

second switch when a first peripheral region of the character and navigation key is pressed and activating the second switch and central switch independently of the first switch when a second peripheral region of the character and navigation key is pressed.

5 11. The electronic device of claim 10 wherein the keyboard includes a command key for sending a command input signal to the processor when in an activated position, the processor programmed for causing the navigation indicator on the display screen to move in a first direction when the command key is in the activated position while the first switch is simultaneously activated independently of the second switch, to move in a
10 second direction when the command key is in the activated position while the second switch is simultaneously activated independently of the first switch, and, in a text entry input mode, for causing the space character to be added to text displayed on the display screen when the command key is not activated and the central switch is activated..

15 12. The electronic device of claim 10 wherein the central switch includes the resilient member and the other switches provide substantially no biasing force against the character and navigation key.

20 13. The electronic device of claim 10 wherein the central switch is a dome switch for providing single click tactile feed back when depressed by the character and navigation key and for biasing the character and navigation key into a resting position, the other switches being non-dome contact switches spaced apart from respective contact areas of the character and navigation key when the character and navigation key is in the resting position.

25 14. The electronic device of claim 10 wherein the plurality of switches includes third and fourth switches, the first, second, third and fourth switches being symmetrically positioned about the central switch, the character and navigation key being displaceable for activating the third switch and the central switch independently of the forth switch
30 when a third peripheral region of the character and navigation key is pressed and

activating the forth switch and central switch independently of the third switch when a forth peripheral region of the character and navigation key is pressed.

15. A hand-held electronic device comprising:

5 a display screen;

a keyboard mounted within a face of the device and comprising a plurality of alphanumeric keys arranged in a plurality of rows across the face between an upper edge and a bottom edge of the face, and a space bar key arranged closer to bottom edge of the face than the alphanumeric keys for inputting a space character for display
10 on the display screen, the space bar key including a navigational input component for moving a navigation indicator on the display screen; and

a processor for controlling the hand-held device, the processor coupled to the keyboard for receiving input signals therefrom and operatively coupled to the display screen.

15 16. The hand-held electronic device of claim 15 wherein the space bar key includes a left arrow navigational input component and a right arrow navigational input component.

20 17. The hand-held electronic device of claim 16 wherein the space bar key includes an up arrow navigational input component and a down arrow navigational input component.

25 18. The hand-held electronic device of claim 15 wherein the keyboard includes first and second dome switches disposed on a printed circuit board facing an underside of the space bar key, the space bar key being push-ably and pivotally mounted relative to the circuit board and having a left portion for activating the first dome switch when displaced towards the circuit board, and a right portion for activating the second dome switch when displaced towards the circuit board, the keyboard including a command
30 key for signalling to the processor a left arrow navigational input when the first dome switch is activated independently of the second dome switch and simultaneously with

the command key and a right arrow navigational input when the second dome switch is activated independently of the first dome switch and simultaneously with the command key.

5 19. The hand-held electronic device of claim 15 wherein the keyboard includes at least first and second directional switches and a central switch disposed on a printed circuit board facing an underside of the space bar key, the space bar key being push-ably and pivotally mounted relative to the circuit board and having a left portion for activating the first directional switch when displaced towards the circuit board, and a
10 right portion for activating the second directional switch when displaced towards the circuit board, and a central portion between the left and right portions for activating the central switch when displaced towards the circuit board, the central switch applying a bias against the spacebar key for providing tactile feedback when the spacebar key is displaced towards the circuit board, and the keyboard further includes a command key
15 for signalling to the processor a left arrow navigational input when the first switch is activated independently of any other directional switches and simultaneously with the command key and a right arrow navigational input when the second switch is activated independently of any other directional switches and simultaneously with the command
20 key.

20 20. The hand-held electronic device of claim 19 wherein the keyboard includes third and forth directional switches disposed on the printed circuit board facing the underside of the space bar key, the space bar key having an upper portion for activating the third switch when displaced towards the circuit board, and a lower portion for activating the
25 forth switch when displaced towards the circuit board, the central portion being between the upper and lower portions, the command key also being for signalling to the processor an up arrow navigational input when the third switch is activated independently of any other directional switches and simultaneously with the command
30 key and a down arrow navigational input when the forth switch is activated independently of any other directional switches and simultaneously with the command key.